Criteria for Successful Completion of an SRR

1 – Design Description:

- Block diagrams clearly define interfaces with external systems, interfaces between each independent system element (spacecraft, science instruments, launch vehicle, ground system, etc.), and interfaces within each independent element down to the subsystem level or below.
- Results of appropriate system analyses (e.g., performance, error budgets, reliability) illustrate adequacy of system design to accomplish mission objectives within acceptable risk.

2 – Requirements Related Processes:

- Processes for the allocation and control of requirements are documented and approved.
- The approach for tracking and controlling allocation and reserves of key resources (such as mass, power, memory, etc.) is documented and approved.
- The approach to controlling and integrating all technical activities is defined and documented.
- Plans for design, production, and verification activities are defined and documented.

3– Requirements Definition:

- Interface requirements with external systems are defined.
- Interface requirements between independent system elements are defined.
- Interface requirements between subsystems and components of each independent system element are defined.
- Functional requirements for subsystems and components of each independent system element are defined so as to fully achieve system requirements. Such requirements are verifiable and are traceable to their respective system requirements.
- Allocation of key resources (mass, power, etc.) to elements of flight subsystems is reasonable.
- Mission operations, data acquisition, data processing, and data analysis requirements are fully defined.

4– Requirements Verification:

- Preliminary approaches for the verification of all requirements has been defined.

5 – Project and Independent Review Activity:

- Timely response to RFAs from previous reviews has occurred. Resultant actions have been implemented effectively. Schedule for completion of any outstanding RFAs is defined.
- An appropriate set of engineering peer reviews has been conducted and documented in compliance with GPG requirements. Resultant actions have been effectively dispositioned and executed. Appropriate additional reviews are planned.
- Recommendations from other project or external review activity that is applicable to the subject matter of the SRR have been adequately implemented.

Results of Review - It is recognized that projects may not fully satisfy all of the above criteria at the time of the SRR. Subsequent to the review, therefore, the review chairman (in consultation with the review team) will assess the degree to which the above criteria have been met, the criticality of the areas where there are shortfalls, how straightforward and likely to succeed are the project's recovery plans, and other relevant factors in making a judgment as to whether the SRR has been successfully completed. Successful completion may be contingent on the responses to some or all of the RFAs

generated at the review. In some cases a delta SRR may be required for the project to successfully pass this milestone.

Successful completion of the SRR constitutes readiness to proceed with preliminary design.